

**Amendments to the Claims:**

Cancel claims 40-52.

Enter claims 31-39 as renumbered and amended versions of claims 41-52.

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

31. **(Currently Amended)** A low cost method of on-site analysis of a surface having fingerprints and other indicia thereon comprising the steps of:

a) providing at least one high intensity blue light emitting diode that will emit light in the wavelength range from about 400 to about 550 nm;

b) compactly mounting said diode on a personal attachment device that is light-weight and allows the person wearing said device to work hands free and readily view a surface with a wide area;

c) providing a portable power source for said diode, said source ~~providing for selection of electric current at a level whereby said diode will have an extended lifetime[;]]~~ being a battery pack having associated resistor means providing for selection of electric current and voltage, said voltage and current levels being selected to extend diode lifetime;

d) applying a fluorescing dye to the surface to be investigated, said dye being selected to fluoresce in light emitted in said wavelength range;

e) maintaining current from said power supply to provide the desired luminous output from said diode for observing a wide area of said surface and for extending the wearing time of said attachment device;

f) illuminating the surface to which said dye has been applied with light emitted from said light emitting diode; and,

g) detecting fluorescent light from indicia or fingerprints on said surface by viewing said light through lens in goggles or eyeglasses that transmit the fluorescent light so that it is visible to the human eye allowing said viewing to be performed hands-free while applying said dye or after said dye has been applied.

32. **(Currently Amended)** The method of claim ~~[[40]]~~ 31 wherein multiple diodes are provided and including the step of cooling said diodes to extend observation time and diode lifetime.

33. **(Currently Amended)** The method of claim ~~[[40]]~~ 31 including the step of cooling said diode wherein said cooling is performed by a portable fan associated with the personal attachment device, ~~said diode lifetime being at least 1000 hours~~ device.

34. **(Currently Amended)** The method of claim ~~[[42]]~~ 33 wherein the personal attachment ~~device is~~ device comprises head gear.

35. **(Currently Amended)** A compact, light-weight, low cost light source and associated apparatus for detecting and analyzing fingerprints or other indicia on a surface to which a selected fluorescing dye is applied comprising:

a) at least one high efficiency, high brightness, light emitting diode, said diode being selected to emit and project light for a sustained period onto a wide area of a surface area in a wavelength range from about 400 nm to about 550 nm wherein the light emitted will cause said dye to fluoresce and transmit detectable light to reveal the presence of fingerprints or other indicia on the surface to which dye is applied;

b) a portable attachment device for mounting said light emitting diode on a person, said device being light weight, compact, and attachable to a person in a manner to provide hands free use of said light source whereby light emitted from said one diode may be directed to the surface area to which dye is applied during the application of dye and/or immediately thereafter; ~~and~~

c) a portable power source for said light emitting diode, said power source including a battery pack having associated resistor means for selecting and means for maintaining the current and voltage to said diode at a level that extends diode lifetime[.] for wide area viewing; and,

d) goggle or eyeglass means having a viewing lens that transmits fluorescent light so that it is visible to the human eye whereby the viewing of a surface can be performed hands free while applying dye to a surface or thereafter.

36. **(Currently Amended)** The light source of claim [[46]] 35 including an array comprising 2 to 100 light emitting diodes.

37. **(Currently Amended)** The light source of claim [[47]] 36 wherein said personal attachment device is a head set means and includes means for cooling said diodes to increase diode lifetime.

38. **(Currently Amended)** The light source of claim [[49]] 37 wherein said cooling means includes a fan.

39. **(Currently Amended)** The light source of claim [[45]] 35 wherein said at least one diode has been selected to emit light at a wavelength that produces light in the range from 400 nm to 550 nm that will cause dyes selected from the group consisting of rhodamine 6G dye and fluorescent dyes to visibly fluoresce and be seen through eyeglasses or goggles with green, orange, or red filters.